



Minimum Plan Submittal Requirements Sheet **(Single-Family Residential and Duplexes)**

In order for the Town of Fountain Hills to consider a building permit application complete, Items A through R must be executed and submitted as a part of a building permit application.

Completed?

A. Application Form:

- ☐------(1) Fill in and complete items 1 through 11.
- ☐------(2) Item 10 should be based upon actual construction valuation, not just material cost.
- ☐------(3) Provide and fill in Parcel Number.

B. Processing the Application:

- ☐------(1) Submit the completed application, two (2) sets of all construction documents designated in Section "C", *Site Plan*, and all required plan review fees for processing.
- (2) After the plans have been checked, corrected by the applicant, rechecked and found to comply with all requirements of the building code and the zoning ordinance, a building permit may then be issued.
- (3) **NO WORK IS TO BE STARTED OR PERMITTED TO PROGRESS UNTIL A BUILDING PERMIT HAS BEEN OBTAINED.** (Except for the installation of required disturbance area fencing once the permit is otherwise ready for issuance.)

Complete?

C. Site Plan

(1) Plan Requirements

- ☐----- (a) Site Plan must be prepared, sealed and currently dated by a Civil Engineer or Registered Land Surveyor.
- ☐----- (b) All plans must be drawn & submitted to minimum scale @1" = 20' or 1/16" = 1' on 24" x 36" drawing paper, providing the following information.
Not required for interior alterations.
- ☐----- (c) **PROVIDE A FULLY DIMENSIONED SITE PLAN.**
Indicate lot size, streets and all Public Utility, Drainage Easements and Hillside Protection Easements (including all areas within 10 feet of the property line).
- ☐----- (d) Provide the zoning district.
- ☐----- (e) Provide maximum coverage percentages (allowed & actual).
- ☐----- (f) Provide Lot, Block and Plat Number and Subdivision Name (if applicable).
- ☐----- (g) Indicate correct and complete address.
- ☐----- (h) Provide Maricopa County Assessor's Parcel Number (State law prohibits the Town from accepting a building permit application without a valid Assessor's Parcel Number).
- ☐----- (i) Show dimensions of lot and north point.
- ☐----- (j) Provide 2-foot (minimum) existing and proposed contour intervals on grading Plan.
- ☐----- (k) Provide Contour Map and Drainage Plan.
- ☐----- (l) Show all required yards, required setbacks and actual setbacks.
- ☐----- (m) Show locations of new driveways and approaches.
- ☐----- (n) Show locations of covered patios.
- ☐----- (o) Provide square footages for garage area, covered patios, entry area, and liveable area.
- ☐----- (p) Indicate location, wall elevations, and height of **all** walls, including freestanding and retaining walls and applicable engineering.
- ☐----- (q) Provide engineering details, and footing & stem rebar schedule, with calcs.
- ☐----- (r) Provide both finish floor and pad elevations.
- ☐----- (s) Provide updated land disturbance calculations for all projects.
- ☐----- (t) Provide land surveyor stamped legal description and owner-signed dedication statement to the Town for Hillside Protection Easement if property is located in Shadow Canyon or any Firerock Country Club subdivision.
- ☐----- (u) Show location of disturbance boundary and note "Chain Link Fence Required".
- ☐----- (v) Show location and size of required parking spaces if in other than a legal carport or garage.

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- ☐------(w) Provide soils report from a qualified agency.
- ☐------(x) Show curb cuts, mailbox, and garbage collection locations.
- ☐------(y) Show percent slope for all required accessible routes. (The Town maximum driveway percent grade is 18%.)
- ☐------(z) Pools and Spas require separate permit.
- ☐------(aa) Show proposed cut and fill quantities and percent (%) of slopes.
- ☐------(bb) Show proposed runoff drainage swales.
- ☐------(cc) Provide sump pump requirements, calculations, size, & location.
- ☐------(dd) Show bench mark.
- ☐------(ee) Note: The following may also be required:
 - Encroachment Permit;
 - Pre-Paving Inspection;
 - Final Grading/Drainage Inspection;
 - Finish Floor Elevation Certification; and/or
 - others, as determined.

(2) Floor Plan: To scale @ 3/16" or 1/4" = 1' -0" providing the following data.

- ☐------(a) Floor plan of addition or area of renovation.
- ☐------(b) Plan of rooms in existing areas adjacent to an addition or enclosure.
- ☐------(c) Direction and size of all floor and ceiling/roof framing members.
- ☐------(d) Location of all partitions and doors and windows by size and type.
- ☐------(e) Locations and symbols for all electrical fixtures, switches outlets, etc.
- ☐------(f) Area in square feet of existing residence and of any new addition.
- ☐------(g) Ceiling height: and height and location of soffits or sloped ceilings

(3) Exterior Elevations: All four elevations to scale of 3/16" or 1/4" = 1' -0 providing data as follows. Label each one. Not required for interior alterations only.

- ☐------(a) Roof pitch and roofing type by size or weight.
- ☐------(b) Exterior finishes by note and specifications.
- ☐------(c) Locations of windows and doors with sizes given unless shown on floor plan.
- ☐------(d) Finish floor level and finish grade and pre-existing grade at exterior of building.
- ☐------(e) Heights from finish floor and pre-existing grade.
- ☐------(f) Height of all chimneys or flues, including spark arrester, from finish floor.

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(4) Details and Sections: To scale minimum 3/8" = 1' -0.

- ☐------(a) Sections through new construction exterior wall showing all details of construction from footing to highest point of roof; designate all materials and members by size, type, grade, thickness, spacing and finishes.
- ☐------(b) Details and engineering on truss rafters, if used.

D. Foundation Plan

- ☐------(1) Specify concrete strength on plans.
- ☐------(2) Note type of soil and soil bearing pressure used in design of footings, commercial and R1 occupancies require soils report.
- ☐------(3) Dimension footing width, thickness, and depth into undisturbed soil.
- ☐------(4) Dimension stem wall thickness.
- ☐------(5) Bolt foundation plates and sills to the foundation with 1/2" bolts spaced not more than six (6') feet apart. Embed bolts at least seven (7") inches in concrete or masonry.
- ☐------(6) Specify foundation grade redwood or approved pressure treated foundation plates and sills for all plates in contact with concrete.
- ☐------(7) Specify pier sizes and provide foundation sections.
- ☐------(8) **NOTE:** Detail at least one (1) #4 bar in top of footing and in top of stem on all wall sections.
- ☐------(9) Provide 18" x 24" under floor access opening.
- ☐------(10) Provide under floor clearance as specified in Section 2317.3.
- ☐------(11) All columns and posts subject to water splash require 1" standoff or installation on pressure treated wood or wood of natural resistance to decay.
- ☐------(12) Show location of all hold-downs at exterior posts and columns and as required for shear.
- ☐------(13) Basement walls, stems over 4 feet and stems restraining more than 2 feet of earth require engineering.
- ☐------(14) Provide Concrete landing at all exterior doors.

E. Exterior Walls (Elevations, Cross-Sections, Details)

One coat stucco systems. Note and specify on drawings:

- ☐------(1) Specify manufacturer and ICBO evaluation report number.
- ☐------(2) Weather resistive barriers shall be installed as required in Section 2506.4. 1402.1. When applied over wood sheathing, shall include two (2) layers of Grade D paper.
- ☐------(3) Detail a corrosion resistant weep screen at or below the plate line and at least 4" above finish grade.

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- ☐------(4) Detail wall framing at 16" O.C. as required by UBC Table 23-I-R-3.
- ☐------(5) Detail reinforcement of **all** masonry walls.
- ☐------(6) Note grouting procedures for masonry walls.
- ☐------(7) Gypsum wallboard used on exterior surfaces **MUST** be specified "Exterior Soffit" or "Exterior Sheathing" type drywall.
- ☐------(8) H2.5 Truss to Top Plate.

F. Shear Plan

Buildings shall be provided with interior and exterior braced wall lines not exceeding 34 feet on center in both the longitudinal and transverse direction of all stories. Braced wall lines shall consist of braced wall panels 25 feet on center, meeting the requirements of Section 2326.11.3.

- ☐------(1) Show location of all interior and exterior braced wall panels.
- ☐------(2) Braced wall panels shall start not more than 8 feet from a corner.
- ☐------(3) Alternate braced wall panels greater than 2 feet 8 inches but less than 4 feet require hold-downs at each end.
- ☐------(4) Provide engineered lateral analysis prepared by an Arizona Registrant if building as designed cannot meet minimum Chapter 23 requirements.

G. Framing (Cross-Section & Details)

- ☐------(1) Provide post anchors and beam ties as required by Section 2311.
- ☐------(2) Note: Detail roof framing anchorage to resist wind uplift.
- ☐------(3) Provide fire-blocking in walls as specified in Section 708.2.1
- ☐------(4) Show double top plates at top of bearing stud walls. (Section 2326.11.2)
- ☐------(5) Specify size of headers over 4'0" wide. (Section 2326.11.6)
- ☐------(6) Provide 22" x 30" minimum access to attic. (Section 1505.1)
- ☐------(7) Specify floor joists spans to conform to Table No. 23-I-V-J-1.
- ☐------(8) Specify roof rafter spans and ceiling joists. (Section 2326.12.1.
- ☐------(9) Floor joists shall be supported laterally at the ends by solid blocking.
- ☐------(10) Roof trusses shall be supported laterally at points of bearing by solid blocking.
- ☐------(11) Provide full width bearing under bearing girder trusses.
- ☐------(12) Bearing studs with over 10 feet of unsupported length require engineering Table 23-1-R-3.

Complete?

H. Garage (Floor Plan)

- ☐----- (1) Openings are not permitted from garage into rooms used for sleeping purposes.
- ☐----- (2) Finish garage side of walls and ceiling adjacent to or under dwelling with a 5/8" Type X drywall.
- ☐----- (3) Specify self-closing, tight fitting 1 3/8 inches solid core door between garage and dwelling.
- ☐----- (4) Show garage framing.
- ☐----- (5) Specify size of header over garage door.

I. Exits (Floor Plan & Elevations)

- ☐----- (1) Each sleeping room shall have at least one openable or exterior window or door for emergency escape or rescue.
- ☐----- (2) The opening shall provide a minimum of 5.7 square feet of net clear opening.
- ☐----- (3) The opening shall provide a minimum of 24 inches clear opening height and 20 inches clear opening width.
- ☐----- (4) Where windows are provided as a means of escape or rescue, the finish sill height shall not exceed 44 inches above finish floor.

J. Stairways

- ☐----- (1) Provide a graspable handrail for stairways on at least one side.
- ☐----- (2) Handrails shall not be less than 34 inches or more than 38 inches above nosing of treads.
- ☐----- (3) Provide guardrails on balconies, porches and landings more than 30 inches above grade. Height shall be a minimum of 36 inches with railings not exceeding 4" opening.
- ☐----- (4) Private stairways serving an occupant load of less than 10 shall have 8" max. rise and 9" minimum run with no runs less than 6" at winding stairs.

K. Light and Ventilation (Floor Plan)

- ☐----- (1) All habitable rooms must be provided with light and ventilation by means of exterior openings.
- ☐----- (2) The glazed area must be a minimum of ten (10) square feet, but not less than 1/10th of the floor area of the room served.
- ☐----- (3) The openable area must be a minimum of five (5) square feet, but not less than 1/20th of the floor area served.

Complete?

- ☐------(4) Bathrooms, toilet compartments, and laundry rooms must be provided with ventilation by means of exterior openings or mechanical ventilation. Detail such rooms on plans.
- ☐------(5) Note tempered glass at all hazardous locations.

L. Engineering (Calculations & Requirements on Plan)

- ☐------(1) Engineering calculations must be signed and sealed by an engineer registered in the State of Arizona.
- ☐------(2) Provide complete engineering calculations and details for all roof trusses.
- ☐------(3) Provide engineering calculations and details for all retaining walls.
- ☐------(4) Provide calculations and details for footings in expansive soils.
- ☐------(5) Provide engineering calcs and details for basement walls.

M. Roofing and Roof Ventilation (Roof Framing Plan)

- ☐------(1) Note and specify a complete roofing system.
- ☐------(2) Specify attachment of roofing materials as required by UBC Table 15-B-1.
- ☐------(3) Provide adequate attic ventilation. Use 1:150 rule for only upper ventilation and 1:300 when both upper 50 % and lower 50% ventilation is provided.
- ☐------(4) Note and detail location and size of attic vents.

N. Fireplaces: No interior wood burning allowed - Permanent gas only (Floor Plan & Elevations)

- ☐------(1) Detail masonry fireplaces including 2" clearance to combustible construction.
- ☐------(2) Note and detail anchorage ties, reinforcement and flue size.
- ☐------(3) Dimension hearth width.
- ☐------(4) Factory built fireplaces must be specified by make and model number.
- ☐------(5) Provide spark arrester with approved screen.
- ☐------(6) Pipe for gas.
- ☐------(7) Permanent log set installed.
- ☐------(8) Block flue open 25 square inches.

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O. Electrical Plan

- ☐----- (1) Note the location and size of SES with minimum 30"x36" working clearance at all panels and disconnects.
- ☐----- (2) Note a #4 bare copper conductor a minimum of 20 feet imbedded in bottom of footing. Isolate from reinforcing steel.
- ☐----- (3) Designate the location of all required light fixtures.
- ☐----- (4) Receptacle outlets shall be installed so that no point along the floor line of an unbroken wall two (2) or more feet in length is more than six (6) feet from an outlet. (NEC 210-52(s))
- ☐----- (5) Receptacle outlets shall be installed at each counter space wider than twelve (12) inches.
- ☐----- (6) At least one receptacle outlet accessible at grade level must be installed on the exterior on both the front and rear and within 25 feet of AC condensers and be GFCI protected.
- ☐----- (7) Two (2) or more 20 amp small appliance circuits are required in kitchen.
- ☐----- (8) One (1) 20 amp branch circuit is required to serve laundry room.
- ☐----- (9) All receptacle outlets in bathrooms, located in the garage and within six (6) feet of kitchen sink must be GFCI protected. Identify on plans.
- ☐----- (10) Outlet boxes in the wall between the dwelling and the garage must be one (1) hour rated boxes. Outlet boxes in garages ceiling shall be metal.
- ☐----- (11) Indicate location of sub panels. Must be three (3) feet of working clearance in front of panel.
- ☐----- (12) Provide smoke detectors in accordance with Section 310-9. Show location on plans.
- ☐----- (13) 1994 UBC requires smoke detectors in all sleeping rooms.
- ☐----- (14) Smoke detectors shall receive their primary power from the building wiring with battery back up.
- ☐----- (15) Install smoke detector in basement.
- ☐----- (16) Provide electrical load calculation for all dwelling units over 3000 square feet or as deemed necessary by the Building Department.
- ☐----- (17) Provide outlet in hallway per NEC 210-52(h)
- ☐----- (18) Receptacles shall be installed so that no point along wall line is more than twenty-four (24") inches from outlet at kitchen counter tops.

P. Plumbing (Floor Plan)

- ☐----- (1) Designate location of water heater and provide access for service and removal.
- ☐----- (2) Note a temperature/pressure relief valve and drain line.
- ☐----- (3) Specify piping materials. (UPC Section 203)
- ☐----- (4) Specify pressure reducer where water pressure exceeds 80 PSI.
- ☐----- (5) Designate locations of hose bibs.

Complete?

Q. Mechanical (Floor Plan)

- ☐------(1) Show location of return air and 26 Ga. duct penetrations at garage.
- ☐------(2) Show location and size of air handlers and compressors.
- ☐------(3) Provide gas schematic.

R. General Notes:

- ☐------(1) Specify 1994 UBC
- ☐------(2) Specify 1994 UPC
- ☐------(3) Specify 1994 UMC
- ☐------(4) Specify 1993 NEC
- ☐------(5) Specify 1997 UFC, with sprinkler amendment.